REMARKS

Reconsideration is respectfully requested.

In the Office Action, (1) claims 1, 2, 10-12, 20-22 and 30 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,540,928 of Kobrin et al. in view of U.S. Patent No. of Hsieh et al, (2) claims 3-7, 13-17 and 23-27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kobrin et al. in view of Hsieh et al. as applied to claims 1, 10 and 20, and further in view of U.S. Patent No. 4,871,630 of Giammarco et al., and (3) claims 8-9, 18-19 and 28-29 were objected to as being dependent upon a rejected base claim, but were indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

Initially, applicant observes that a new search was conducted and new rejections have been entered without applicant having amended the claims or presented new prior art. This is contrary to the policy of the MPEP governing the examination of U.S. patent applications. The FORWARD section of the MPEP indicates that it contains *instructions* to examiners "and outlines current procedures which the examiners are required or authorized to follow in appropriate cases in the normal examination of a patent application." This section makes it clear that the MPEP does not have the force of federal law or regulations; but nevertheless, it reflects USPTO policy which governs the administrative procedures for examination of U.S. patent applications in accordance with those laws and regulations.

According to MPEP 904.03, the examiner should conduct a comprehensive search as a prerequisite to a speedy and just determination of the issues raised by the claims of the application. MPEP 707.07(g) states that piecemeal examination should be avoided. In other words, all appropriate objections and rejections should be made in the first Office Action. Per

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MPEP 707 and 37 CFR 1.104(c)(2), the examiner must cite the best prior art references in connection with the examination of the pending claims. Per MPEP 707.02, the Supervisory Primary Examiner should impress on assistants that the shortest path to a final disposition of a case is by finding the best references on a first search and carefully applying these references. A second search *should not* be conducted by the examiner where the applicant responds and does not change the nature of the invention for which protection is sought. Where the applicant's response does not amend the claims, argue any different scope of the claims, or cite new prior art references, the examiner should not, simply because the applicant has overcome all outstanding rejections, conduct another search in the hopes of finding better prior art. Where all outstanding objections as to form and rejections as to substance have been overcome by the applicant, a notice of allowance should ordinarily follow, not a new search followed by new rejections.

Applicant additionally traverses the new rejections on the ground that Hsieh would not have suggested a modification to Kobrin so that a trench narrowing spacer layer is formed using low temperature chemical vapor deposition. The layer 64 in Hsieh is not a spacer layer that is deposited for the purpose of narrowing a trench, particularly a trench used for electroplating a structure. The layer 64 is a structure made of P-type doped silicon that forms a transistor base region (see column 6, lines 1-20). A "low temperature silicon epitaxy by ultra-high vacuum/chemical vapor deposition" process is used to improve the quality of the base region by producing "very sharply defined doping profiles" (see column 6, lines 13-14). This process is not used as a trench shaping or sizing tool for defining the features of an electroplated structure. The reference to "defect-free, thin layers" at column 2, line 4 thus refers to the functional properties of a doped base region, not to the suitability of the layer 64 for use in trench

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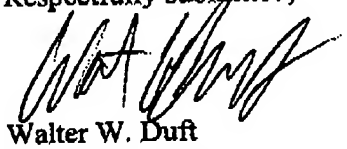
formation. There is no express or implied indication in Hsieh that its teachings relative to the layer 64 should be incorporated in connection with the formation of electroplating trenches.

As further noted in applicant's response to the first Office Action, Kobrin's trench narrowing features shown by reference numbers 62/64 and 72/74 are generated by what is referred to at column 4, lines 22-36 as a "silylation" process in which the resist layer formed with a trench is expanded by "replacement of an active hydrogen of a protic material with a substituted silicon atom." As the resist layer expands, the trench narrows. Just as there is no teaching or suggestion in Hsieh to substitute this silylation process with the process used in Hsieh for forming a base region of a transistor, so too is there no suggestion in Kobrin to make such a substitution in lieu of the touted silylation process.

Without an express or implied indication in either reference to combine them in the manner proposed in the Office Action, a rejection based on obviousness cannot be sustained. See MPEP 2143 ("The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).").

In view of the foregoing, Applicant respectfully requests that all objections and rejections be withdrawn and that Notices of Allowability and Allowance be duly issued.

Respectfully submitted,



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